

# 1W & 2W DC/DC Converters

SMD Unregulated 1Watt and 2Watt DC/DC Converters



## Product Features:

- DC/DC 1W and 2W Unregulated Converters
- 1.5KVdc Isolation Voltage
- Functional Insulation
- Operating Temperature -40C to +105C
- High Efficiency & Low Ripple/Noise
- Continuous Short-Circuit Protection
- Meets UL/EN62368-1

### 1 Watt, 1.5KV

Part Number	Input Voltage <sup>1</sup>	Output Voltage	Input Current No-Load/Full-Load	Max Output Current	Output Ripple/Noise <sup>2</sup>	Efficiency @ Full Load
DC11-V0303SLF	3.3V	3.3V	5 / 370mA	300mA	50mV	81%
DC11-V0305SLF	3.3V	5V	7 / 360mA	200mA	40mV	85%
DC11-V0312SLF	3.3V	12V	8 / 340mA	84mA	25mV	89%
DC11-V0503SLF	5V	3.3V	3 / 240mA	300mA	50mV	82%
DC11-V0505SLF	5V	5V	4 / 230mA	200mA	50mV	86%
DC11-V0512SLF	5V	12V	7 / 230mA	84mA	30mV	90%
DC11-V1203SLF	12V	3.3V	2 / 100mA	300mA	65mV	82%
DC11-V1205SLF	12V	5V	2 / 100mA	200mA	50mV	87%
DC11-V1212SLF	12V	12V	4 / 100mA	84mA	25mV	90%

### 2 Watt, 1.5KV

Part Number	Input Voltage <sup>1</sup>	Output Voltage	Input Current No-Load/Full-Load	Max Output Current	Output Ripple/Noise <sup>2</sup>	Efficiency @ Full Load
DC21-V0303SLF	3.3V	3.3V	5 / 760mA	600mA <sup>3</sup>	100mV	77%
DC21-V0305SLF	3.3V	5V	5 / 700mA	400mA <sup>3</sup>	70mV	83%
DC21-V0312SLF	3.3V	12V	10 / 700mA	167mA	50mV	87%
DC21-V0503SLF	5V	3.3V	5 / 480mA	600mA <sup>3</sup>	100mV	80%
DC21-V0505SLF	5V	5V	5 / 480mA	400mA	60mV	85%
DC21-V0509SLF	5V	9V	7 / 440mA	220mA	60mV	89%
DC21-V0512SLF	5V	12V	10 / 440mA	167mA	40mV	89%
DC21-V1203SLF	12V	3.3V	5 / 200mA	600mA <sup>3</sup>	60mV	82%
DC21-V1205SLF	12V	5V	5 / 200mA	400mA	60mV	86%
DC21-V1212SLF	12V	12V	5 / 200mA	167mA	30mV	90%

Notes:

<sup>1</sup>Maximum input voltage range +/-10% from nominal

<sup>2</sup>Output ripple/noise tested with a 4.7uF capacitor at input and 10uF capacitor at output of the device @ 20Mhz BW

<sup>3</sup>Maximum current derating above 85C by 20% at 105C

<sup>4</sup>Line regulation: +/-1.3% per 1% input change for 3.3V versions and less than +/-1.2% for all other devices

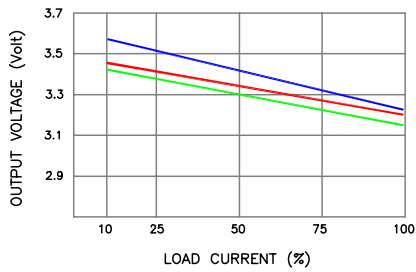
<sup>5</sup>RoHS exemption 7(c)-1 is applicable to internal chip resistor

## Output Voltage vs. Load

**1W**

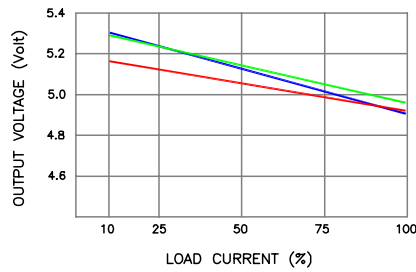
3.3Vin — 5Vin — 12Vin —

### 3.3V OUTPUT VOLTAGE VS. LOAD



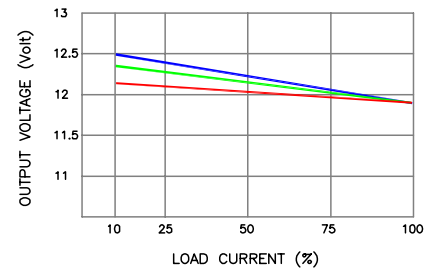
DC11-V0303SLF  
DC11-V0503SLF  
DC11-V1203SLF

### 5V OUTPUT VOLTAGE VS. LOAD



DC11-V0305SLF  
DC11-V0505SLF  
DC11-V1205SLF

### 12V OUTPUT VOLTAGE VS. LOAD

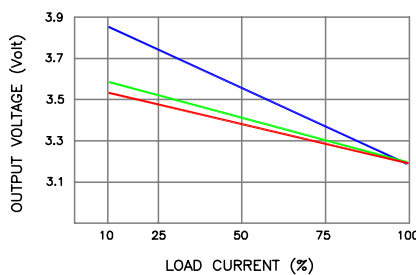


DC11-V0312SLF  
DC11-V0512SLF  
DC11-V1212SLF

**2W**

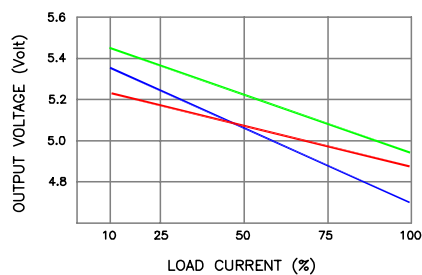
3.3Vin — 5Vin — 12Vin —

### 3.3V OUTPUT VOLTAGE VS. LOAD



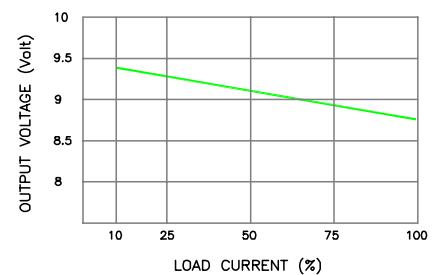
DC21-V0303SLF  
DC21-V0503SLF  
DC21-V1203SLF

### 5V OUTPUT VOLTAGE VS. LOAD



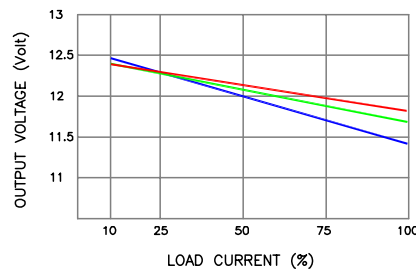
DC21-V0305SLF  
DC21-V0505SLF  
DC21-V1205SLF

### 9V OUTPUT VOLTAGE VS. LOAD



DC21-V0509SLF

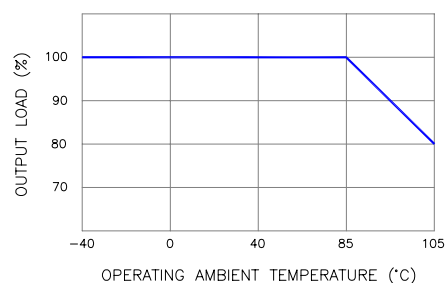
### 12V OUTPUT VOLTAGE VS. LOAD



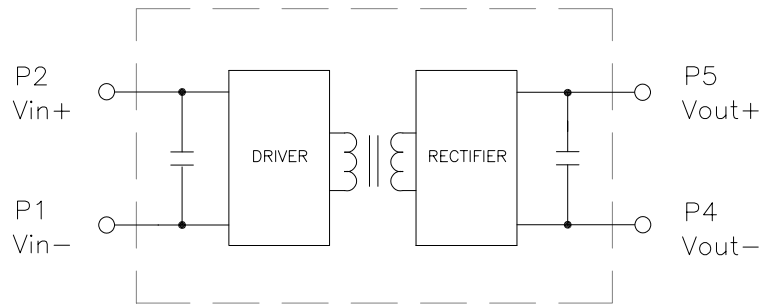
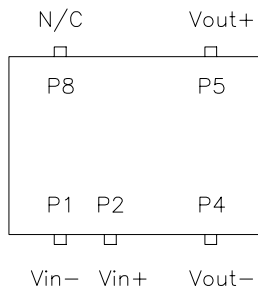
DC21-V0312SLF  
DC21-V0512SLF  
DC21-V1212SLF

## Power Derating Curve

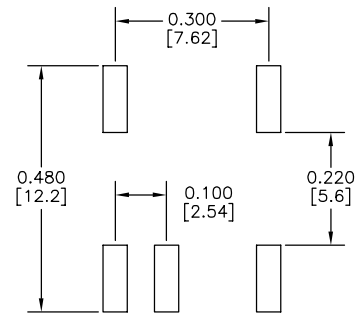
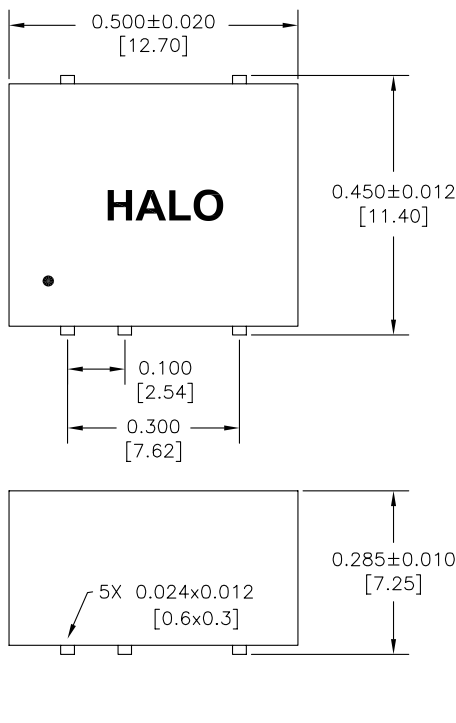
### OUTPUT POWER DERATING



Applicable Part Numbers:  
DC21-V0303SLF  
DC21-V0305SLF  
DC21-V0503SLF  
DC21-V1203SLF



## Mechanical



RECOMMENDED SOLDER PAD DIM.

Dimension: inch [mm]



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